Abstract of the Disclosure

The present invention provides novel systems for sequencing nucleic acid molecules using dNTPs that are 3'end labeled with cleavable tags that block further extension and uniquely identify the bases to which they are attached. Removal of the tags liberates the 3' ends of the extension products for further extension. In related embodiments, oligonucleotides containing sequence-related cleavable tags are employed in a ligation reaction to determine the sequence of a particular DNA sample.

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